

Abstract

Appliance for determining the impedance (Z_{aw}) of the respiratory tract by measuring the alternating pressure (dp) in the region of the mouth of a patient after producing an oscillating air pressure signal. Said appliance consists of a mouthpiece, an electroacoustic transducer provided with a mechanical oscillation system for generating the oscillating air pressure signal, a tube for connecting the electroacoustic transducer to the mouthpiece, a reference resistance for determining the reference impedance (Z_{ref}), and a computing device for calculating the impedance (Z_{aw}) of the respiratory tract on the basis of the reference impedance (Z_{ref}) of the reference resistance, the entire impedance (Z_{ges}), and the entire phase angle (ϕ), wherein the change in the deflections of the mechanical oscillation system (2) on the electroacoustic transducer, caused by the alternating pressure (dp) of the breathing of the patient, can be measured in a contactless manner by means of at least one measuring device.